Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of identifying a candidate substance that inhibits the aggregation of a mammalian aggregate-prone amyloid protein in a yeast cell, comprising:

(a) contacting a yeast cell that expresses a chimeric protein comprising a mammalian aggregate-prone amyloid protein with said candidate substance under conditions effective to allow aggregated amyloid formation in the yeast cell, wherein the chimeric protein comprises at least an aggregate forming domain of β-amyloid; and

(b) determining the ability of said candidate substance to inhibit the aggregation of the aggregate-prone amyloid protein in the yeast cell.

2-6. (Cancelled)

7. (Previously Presented) The method of claim 1, wherein the chimeric protein comprises at least an aggregate forming domain of a mammalian aggregate-prone amyloid protein operably attached to a detectable marker protein.

8. (Original) The method of claim 7, wherein said marker protein is green fluorescent protein or luciferase.

9. (Original) The method of claim 7, wherein said marker protein is a drug-resistance marker protein.

10. (Original) The method of claim 7, wherein said marker protein is a hormone receptor.

11. (Original) The method of claim 10, wherein said hormone receptor is a glucocorticoid receptor.

12. (Cancelled)

13. (Currently Amended) The method of claim 1~~-12~~, wherein the chimeric protein comprises at least amino acids 1-42 of β-amyloid ~~protein~~.

14. (Currently Amended) The method of claim 1, wherein the chimeric protein comprises Sup35 in which the N-terminal domain has been replaced by amino acids 1-42 of β-amyloid ~~protein~~.

15. (Previously Presented) The method of claim 1, wherein any aggregation of the mammalian aggregate-prone amyloid protein is detected by the ability of the aggregated protein to bind Congo Red.

16. (Previously Presented) The method of claim 1, wherein any aggregation of the mammalian aggregate-prone amyloid protein is detected by increased protease resistance of the aggregated protein.

17. (Original) The method of claim 1, wherein the aggregate-prone amyloid protein is labeled.

18. (Original) The method of claim 17, wherein the label is a radioactive isotope, a fluorophore, or a chromophore.

19. (Original) The method of claim 18, wherein the label is ^{35}S.

20. (Original) The method of claim 18, wherein the fluorophore comprises a green fluorescent protein polypeptide.

21. (Cancelled)

22. (Original) The method of claim 1, wherein said yeast cell overexpresses Hsp104.

23-36. (Cancelled)

37. (Previously Presented) The method of claim 1, wherein aggregated amyloid formation is evidenced by the formation of fibrillary material.

38-40. (Cancelled)

41. (New) A method of identifying a candidate substance that inhibits the aggregation of a mammalian aggregate-prone amyloid protein in a yeast cell, comprising:

(a) contacting a yeast cell that expresses a chimeric protein comprising a mammalian aggregate-prone amyloid protein with said candidate substance under conditions effective to allow aggregated amyloid formation in the yeast cell, wherein the chimeric protein comprises at least an aggregate forming domain of prion protein; and

(b) determining the ability of said candidate substance to inhibit the aggregation of the aggregate-prone amyloid protein in the yeast cell.

42. (New) The method of claim 41, wherein the chimeric protein comprises at least an aggregate forming domain of a mammalian aggregate-prone amyloid protein operably attached to a detectable marker protein.

43. (New) The method of claim 42, wherein said marker protein is green fluorescent protein or luciferase.

44. (New) The method of claim 42, wherein said marker protein is a drug-resistance marker protein.

45. (New) The method of claim 42, wherein said marker protein is a hormone receptor.

46. (New) The method of claim 45, wherein said hormone receptor is a glucocorticoid receptor.

47. (New) The method of claim 41, wherein any aggregation of the mammalian aggregate-prone amyloid protein is detected by the ability of the aggregated protein to bind Congo Red.

48. (New) The method of claim 41, wherein any aggregation of the mammalian aggregate-prone amyloid protein is detected by increased protease resistance of the aggregated protein.

49. (New) The method of claim 41, wherein the aggregate-prone amyloid protein is labeled.

50. (New) The method of claim 49, wherein the label is a radioactive isotope, a fluorophore, or a chromophore.

51. (New) The method of claim 50, wherein the label is ^{35}S.

52. (New) The method of claim 50, wherein the fluorophore comprises a green fluorescent protein polypeptide.

53. (New) The method of claim 41, wherein said yeast cell overexpresses Hsp104.

54. (New) The method of claim 41, wherein aggregated amyloid formation is evidenced by the formation of fibrillary material.